

Application No. 09/725,081

of legs each of which is inserted in a slot and connected to another at one of said core ends to form a joint coil end; and

a rotor rotatably supported by said frame and disposed inside said stator core so as to electro-magnetically connect said stator core;

wherein:

said liquid passage is disposed near said joint coil end,

said rotor has a plurality (P) of different magnetic poles alternately disposed at prescribed intervals in the circumferential direction thereof,

said plurality of slots is disposed in said stator to increase contact area of said U-shaped conductor segments with slot inner walls, and

the number of said slots is equal to or larger than two times as many as the product of the number of said magnetic poles and the number of the phase of said stator.

Please add new claims 8-10 as follows:

- 8. The liquid-cooled vehicle rotary electric machine as claimed in claim 1, wherein said joint coil end is spaced more than 2 mm from said frame.--
- 9. The liquid-cooled vehicle rotary electric machine as claimed in claim 1, wherein a space is defined between adjacent conductor segments at said joint coil end.--
- 10. A liquid-cooled vehicle rotary electric machine operable in a motor mode or a generator mode, comprising:
- a frame having an inner periphery, an outer periphery and including a first frame portion and a second frame portion, said first frame portion having a liquid passage disposed between said inner periphery and outer periphery;
 - a stator core having an outer periphery, first and second core ends and a plurality of slots, said first core end being fitted to the inner periphery of said first frame portion and said second core end being fitted to said inner periphery of said second frame portions;

Application No. 09/725,081

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a multi-phase stator winding accommodated in said plurality of slots, said stator winding including a plurality of U-shaped conductor segments each of which has a pair of legs each of which is inserted in a slot and connected to another at said first core end to form a joint coil end; and

a rotor rotatably supported by said frame and disposed inside said stator core so as to electro-magnetically connect said stator core;

wherein:

said rotor has a plurality of different magnetic poles alternately disposed at prescribed intervals in the circumferential direction thereof,

said plurality of slots is disposed in said stator to increase contact area of said U-shaped conductor segments with slot inner walls, and

the number of said slots is equal to or larger than two times as many as the product of the number of said magnetic poles and the number of the phase of said stator.--

REMARKS

Claims 1-4 and 6-10 are pending. By this Amendment, claim 1 is amended, and claims 8-10 are added. Reconsideration based on the above amendments and following remarks is respectfully requested.

The attached Appendix includes a marked-up copy of the rewritten claim (37 C.F.R. §1.121(c)(1)(ii)).

Entry of the amendments is proper under 37 C.F.R. §1.116 since the amendments: (a) place the application in condition for allowance (for the reasons discussed herein); (b) do not raise any new issue requiring further search and/or consideration (since the amendments amplify issues previously discussed throughout prosecution); (c) satisfy a requirement of form asserted in the previous Office Action; and (d) place the application in better form for appeal, should an appeal be necessary. The amendments are necessary and were not earlier